### **REMARKS**

Claims 7 and 8 remain pending in the present application. Claims 1, 3, 4, 6, 9, 10, 12, 13 and 15-19 have been cancelled. Claim 7 has been amended. Basis for the amendments can be found throughout the specification, claims and drawings as originally filed.

#### **ENTRANCE OF AMENDMENT**

Applicants respectfully request entry and consideration of this amendment. Claim 7 has been amended to include the limitations of Claim 1; Claim 8 depends from Claim 7 and all other claims have been cancelled. Thus, since the Examiner has already considered Claim 7 in dependent form, this amendment does not present new issues which require additional searching on consideration by the Examiner.

## **CLAIM OBJECTIONS**

Claim 19 is objected to because of informalities. Claim 19 has been cancelled. Withdrawal of the objection is respectfully requested.

# REJECTION UNDER 35 U.S.C. § 101

Claims 10, 12, 13 and 15-18 are rejected under 35 U.S.C. § 101 because the claimed invention is directed to non-statutory subject matter. Applicants respectfully traverse this rejection. Claims 10, 12, 13 and 15-18 have been cancelled. Applicants reserve the right to prosecute these claims in a further continuation and/or divisional application.

# REJECTION UNDER 35 U.S.C. § 112

Claim 10 is rejected under 35 U.S.C. § 112, first paragraph, for undue breadth. Applicants respectfully traverse this rejection. Claim 10 has been cancelled. Applicants reserve the right to prosecute this claim in a further continuation and/or divisional application.

# REJECTION UNDER 35 U.S.C. § 103

Claims 1, 3-4, 6-10, 12-13 and 15-19 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Ebisu, et al. (U.S. Pat. No. 6,241,004) in view of Naoki, et al. ("134<sup>th</sup> Japan Lecture Convention"). Claims 1, 3-4, 6-10, 12-13 and 15-19 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Ebisu in view of Naoki, et al. ("136<sup>th</sup> Japan Lecture Convention"). Applicants respectfully traverse this rejection.

Claim 7 depended from Claim 1. Claim 7 has been amended to independent form to include the limitations of Claim 1. Claim 7 contains the limitations of critical value setting means for setting a critical specific gravity and determining means which determines if the region specific gravity is not greater than the critical specific gravity and advising changing design when the region specific gravity is not greater than the critical specific gravity.

On page 7 of the Office Action, the Examiner cited "Table 7 Gravity Calculation" of Ebisu when rejecting Claim 7. Table 7 of Ebisu discloses analytical results for the various operating conditions. It discloses "2 Conventional" which has 8% at center porosity; "3 Eprocess" which has No porosity; and "3 Eprocess" which also has

No porosity. Ebisu does not disclose if the 8% at center porosity is above and/or below a "Critical Specific Gravity" and Ebisu clearly does not disclose critical value setting means for setting a critical specific gravity. Since Ebisu does not disclose a critical specific gravity, it cannot and does not disclose determining means for determining if the region specific gravity is not greater than the critical specific gravity as is defined in Claim 7.

Thus, Applicants believe Claim 7 patentably distinguishes over the art of record. Likewise, Claim 8, which depends from Claim 7, is also believed to patentably distinguish over the art of record. Claims 1, 3, 4, 6, 9, 10, 12, 13 and 15-19 have been cancelled. Reconsideration of the rejection is respectfully requested.

#### CONCLUSION

It is believed that all of the stated grounds of rejection have been properly traversed, accommodated, or rendered moot. Applicants therefore respectfully request that the Examiner reconsider and withdraw all presently outstanding rejections. It is believed that a full and complete response has been made to the outstanding Office Action and the present application is in condition for allowance. Thus, prompt and favorable consideration of this amendment is respectfully requested. If the Examiner believes that personal communication will expedite prosecution of this application, the Examiner is invited to telephone the undersigned at (248) 641-1600.

Respectfully submitted,

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